

**Catalog # 10-2955**

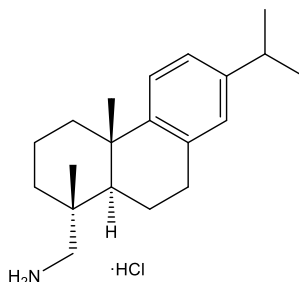
**Leelamine HCl**

CAS# 16496-99-4

Lylamine HCl; (+)-Dehydroabietylamine HCl

(1*R*,4*aS*,10*aR*)-1,2,3,4,4*a*,9,10,10*a*-Octahydro-1-,4*a*-dimethyl-7-(1-methylethyl)-1-phenanthrenemethanamine hydrochloride

Lot # S105130



A lysosomotropic, intracellular cholesterol transport inhibitor with potential chemotherapeutic activity. Induces cholesterol accumulation in lysosomal/endosomal cell compartments via inhibition of autophagic flux.<sup>1</sup> Induces apoptosis in breast cancer<sup>2</sup>, melanoma<sup>3</sup> and prostate cancer cells<sup>4</sup>. A selective inducer of cytochrome P450 2B.<sup>5</sup> Inhibits pyruvate dehydrogenase kinase (PDK), IC<sub>50</sub>=9.5 μM.<sup>6</sup>

- 1) Kuzu *et al.* (2014), *Leelamine mediated cancer cell death through inhibition of intracellular cholesterol transport*; Mol. Cancer Ther., **13** 1690
- 2) Sehrawat *et al.* (2017), *Cancer-selective death of human breast cancer cells by leelamine is mediated by bax and bak activation*; Am. Mol. Carcinol., **56** 337
- 3) Chen *et al.* (2017), *Targeting cholesterol transport in circulating melanoma cells to inhibit metastasis*; Pigment Cell Melanoma Res., **30** 541
- 4) Singh *et al.* (2018), *Therapeutic Potential of Leelamine, a Novel Inhibitor of Androgen Receptor and Castration-Resistant Prostate Cancer*; Mol. Cancer Ther., **17** 2079
- 5) Sim *et al.* (2015), *Selective induction of hepatic cytochrome P450 2B activity by leelamine in vivo, as a potent novel inducer*; Arch. Pharm. Res., **38** 725
- 6) Aicher *et al.* (1999), *Triterpene and diterpene inhibitors of pyruvate dehydrogenase kinase (PDK)*; Bioorg. Med. Chem. Lett., **9** 2223

**PHYSICAL DATA**

Molecular Weight:	321.93
Molecular Formula:	C <sub>20</sub> H <sub>31</sub> N · HCl
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml) or Water (up to 9 mg/ml)
Physical Description:	Off-white or beige solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or distilled water may be stored at -20°C for up to 1 month.

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Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

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